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FINAL REPORT

PHASE 2 REPORT: COST OF GROWTH MODEL BASELINE FORECAST AND CASE STUDIES

Prepared for:

City of Redmond

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I. INTRODUCTION

The City of Redmond faces important policy questions as it approaches the urban growth and development that is almost certain to occur during the next two decades. In addition to policy concerns expressed in Redmond's Comprehensive Plan, Washington State's Growth Management Act (GMA) requires that municipal levels of service not be reduced to accommodate the demands of growth. GMA requires that development must, when taken either as a whole or as individual projects, "pay its own way". As a consequence of the Comprehensive Plan policy and the GMA requirements, Redmond seeks to determine the magnitude of potential fiscal impacts associated with growth, and derive appropriate policy actions to address them.

The Cost of Growth Model (CGM) project was completed in two phases. ***Phase 1*** involved an effort to validate the initial conception of the Cost of Growth Model (as expressed in the *Requests for Proposals* issued by the City in March 1996) and to reveal trends, information, procedures, and opinions within the City that would influence the preparation and/or the application of the CGM. The ***Phase 1 Report*** confirmed that many of the concerns expressed by City staff and policy makers regarding the impacts of growth on the City were well founded. Maintaining existing municipal service levels and managing the growth process will present the City with some significant challenges.

In *Phase 2*, Economic & Planning Systems, Inc. (EPS), worked closely with City staff to construct and refine the "Cost of Growth Model" (CGM). Two reports have been prepared as part of the *Phase 2* effort. First, EPS prepared a *Six Year Budget Forecast* using the CGM to support the 1997 budget process. This second ***Phase 2 Report*** documents the City's effort to construct a "Cost of Growth Model" (CGM) and presents the results of three typical applications of the CGM:

- A Baseline Forecast for the City of Redmond. The Baseline Analysis is a 20 year forecast of municipal costs and revenues presuming continued development as defined by the Comprehensive Plan and current City fiscal policies.
- A Neighborhood Case Study which focuses on the annexation of the Plateau. The neighborhood analysis evaluates the fiscal impacts of development at the neighborhood-level. The case study presented in this report evaluates the effects of the annexation of the presently unincorporated Plateau.
- A Project Case Study which evaluates the fiscal effects of the Town Center Project. The project-level analysis evaluates the fiscal impacts of the development of a specific project proposed for development in the City. The case study presented in this report evaluates the effects of the Town Center Project, a large commercial project currently under construction in Redmond. The Project Case study also includes a comparison of the fiscal impact of the original approved Master Plan and a scenario with less retail space.

In addition to this report, the Cost of Growth Model study also includes the installation of the model at the City, training of City staff to operate the model, and documentation of the model. Model documentation is presented under separate cover.

SUMMARY OF KEY FINDINGS

- With the installation of the CGM, the City now has a state-of-the-art computer model to assist with its on-going land use and financial management responsibilities. The City will be able to use the CGM to support ongoing project review, administrative activities, and policy analysis. The CGM is designed to inform policy makers whether new development (or total City development) is generating sufficient municipal revenue to cover costs associated with providing desired levels of public services.

- The *Baseline Forecast* produced by the CGM indicates that if revenue policies remain constant and current levels of service and service delivery methods are maintained, annual municipal service costs will exceed the annual municipal revenues during the next 20 years.

- The *Baseline Forecast* reveals that the City will need to make changes in its land use policies, service delivery, and/or revenue policies during the next 20 years to maintain historical budget commitments and achieve other budget and investment priorities (e.g., build sufficient replacement reserves).

- The Plateau Annexation Case Study indicates that the cost of providing municipal services to the Plateau will exceed the projected revenues by over $1 million per year.

- The Town Center Case Study prepared by the CGM indicates that the revenues generated by the Town Center Project will exceed the cost of providing municipal services by $400,000 per year in the initial year of occupancy. The surplus is projected to increase to approximately $1.0 million per year at full occupancy.

CONCEPTUAL FRAMEWORK

The issues surrounding the costs of growth have been hotly debated and studied in the United States for at least the last 20 years. The erosion of aid to local governments from state and federal sources during the past 15 years have only sharpened the debate, as reflected in the recent controversy over adoption of the GMA mandated Comprehensive Planning Policies (CPPs) by King County. At the same time, citizens continue to expect high levels of municipal services while reluctant to increase local taxes.

As a result of these trends, fiscal impact analysis, (the forecasting of government service costs and public revenues related to growth), has become a common part of comprehensive planning and development project review. Key questions raised include:

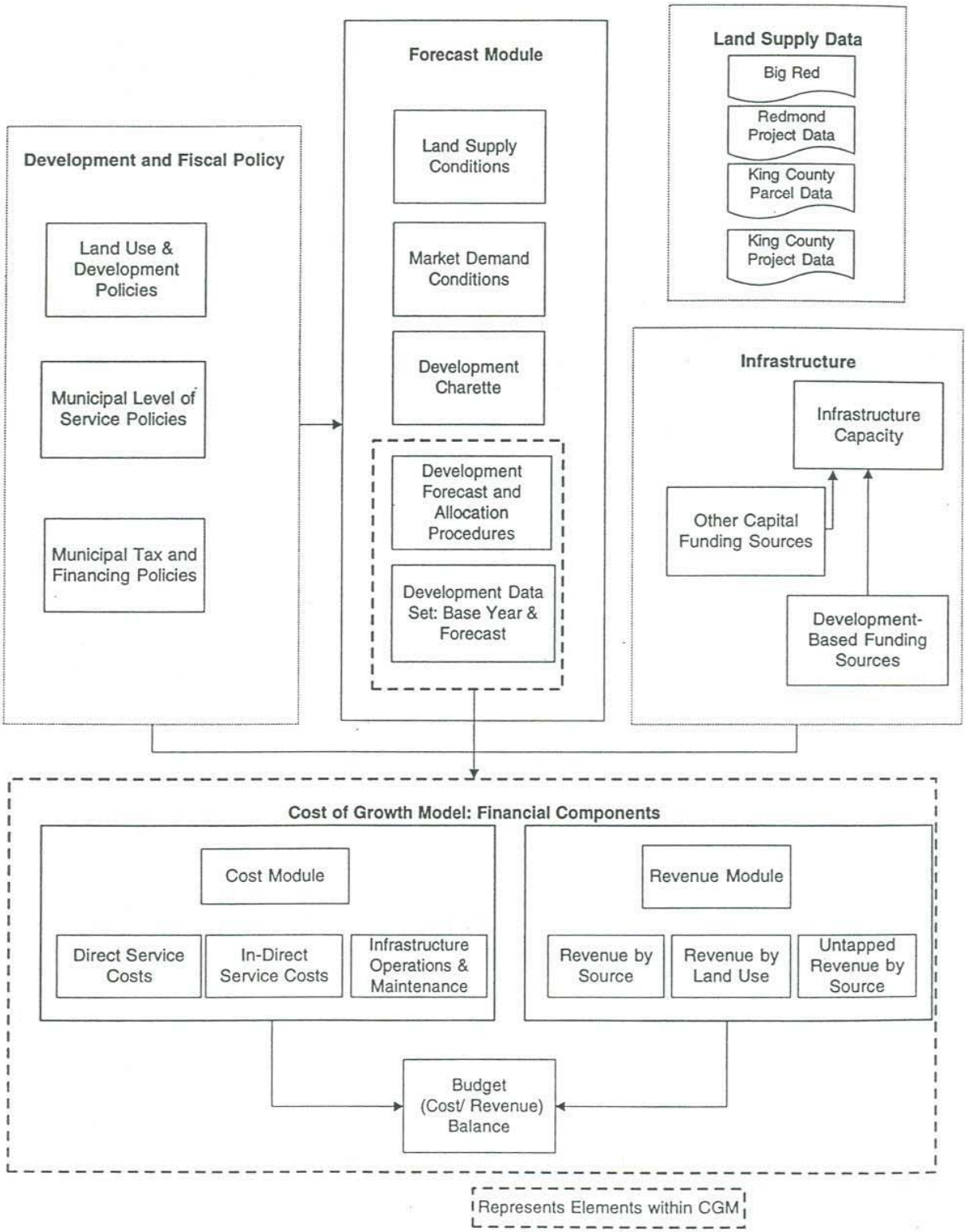
- What are the expected marginal increases in costs and revenues derived from new development, e.g., how does adding an acre of park land affect the Parks and Recreation annual park maintenance and operations budget?
- To what extent should new development pay for its marginal cost of services or otherwise support existing costs?
- How should fixed overhead and social service costs unrelated to development be allocated?
- How should a city balance fiscal "winners" and "losers" e.g.; those land uses that create positive fiscal balances, such as certain commercial projects, versus those land uses that create negative fiscal balances, such as certain residential projects, while recognizing that both are required to create a sustainable City? In other words, how should the City strive for a balance between jobs and housing?
- How should the City balance the need for economic growth with "quality of life" issues such as the need for parks and open space, recreation programs, public amenities, clean air, transit and transportation improvements?

Given the complicated nature of these questions, Redmond's Cost of Growth Model has taken a systems approach which takes account of independent factors such as regional growth trends and local market characteristics, developable land supply and environmental factors, infrastructure investment, City policies regarding land use, housing, service levels, and revenue. **Figure 1** presents a conceptual framework of how these factors interact and how they "link" with each other. As shown in **Figure 1**, there are five major components of the Cost of Growth Model. The sub-components and relationships between each component are reflected on the flow chart and are described below.

1. **Land Supply Data**: This component links regional growth trends (e.g., as defined by the Puget Sound Regional Council (PSRC), "pipeline" development projects (as defined by the Redmond and King County project data), existing development on the ground (as defined by the City's parcel database known as *Big Red*, the City's land use database and tax assessor records, and King County parcel data from tax assessor records). In combination this data determines the "effective" supply of developable land in the community.

2. **Forecast Module:** This component links total vacant and under-utilized land supply with physical or environmental constraints (wetlands, topography, etc.) which limit usefulness for urban development, local real estate market conditions, and the "effective" supply of developable land. In combination, these factors form the basis of the projected development path for the community.

Figure 1
Conceptual Framework
Redmond Cost of Growth Model



3. **Infrastructure:** This component links existing infrastructure and public facilities' capacity, (e.g., roads, sewer and water systems, parks, fire stations, and office space for City employees), planned increases in this capacity, and funding sources for these improvements. The infrastructure component helps determine the "effective" land supply and recurring operations and maintenance costs. New infrastructure is often required to increase the "effective" land supply. Likewise, new infrastructure will increase the amount of facilities that must be operated and maintained by the City, thus increasing operating budgets.

4. **Development and Fiscal Policy:** This component links the broad dimensions of City policies regarding land use development, infrastructure improvements, municipal service levels, and tax policy. These policies influence effective land supply (e.g., the Comprehensive Plan, and Zoning Ordinance, etc.), infrastructure and service expenditures (e.g., the Capital Improvement Program (CIP)), and the taxes, charges and fees levied by the City.

5. **Cost of Growth Model - Financial Component:** This component uses the outputs of the first four components to estimate future recurring City budget costs and revenues. A computerized cash flow model is the technical core of the Cost of Growth Model. The cash flow model quantifies the relationship between growth and demographic factors, land use policies, land use development, infrastructure improvements, and reflects the operating costs and revenues associated with providing a given level of municipal services to the residents and businesses within the City. The fiscal cash flow uses a combination of average and marginal cost factors to project the costs and revenues associated with future development in the City.

TECHNICAL APPROACH

As described in the introduction of this report the Cost of Growth Model (CGM) project was completed in two phases. The ***Phase 1 Report*** confirmed many of the concerns expressed by the City's User's Group (the ad hoc committee set up to consider the utility, applications, and specifications of the Cost of Growth Model). There is clearly a need to better inform policy makers with respect to the impacts of growth. This is especially true given the large amount of "pipeline" development that has already been approved. Simply managing the growth process and serving this amount of growth in the near future will be challenging. Although the City has responded successfully to growth pressures in the past in a variety of ways and is continuing to maintain and improve services as growth has occurred, the City may not be able to do so in the future. For example, the City has established a number of plans and programs to accommodate and manage future development; however, these plans and programs may not be fully coordinated and may not be affordable in the long run. The Cost of Growth Model addresses these issues and informs policy makers regarding the cost and revenue implications of their decisions.

Following presentation of the ***Phase 1 Report***, a decision was made by the Administration and City Council to proceed with ***Phase 2***, the development and application of the CGM, which included development of the cash flow model application and the related cost and revenue research. Key areas of research included sub-regional land supply analysis and preparation of a development forecast; detailed analysis of departmental operations and maintenance costs; and analysis of municipal revenues and their underlying estimating relationships.

During the deliberations regarding the 1997-1998 Biennial Budget, an initial application of the Cost of Growth Model was prepared. The ***Six Year Cost and Revenue Forecast Report*** was prepared using an initial version of the CGM. The Forecast was based upon City costs for services as expressed in the 1996 Budget and a short-term development forecast reflecting primarily "pipeline" development projects. The Forecast indicated, among other findings, that the amount of General Fund revenue allocated to capital projects was unsustainable in the near future, given the expected increases in City costs and the constraints being imposed upon key City revenue sources (e.g., sales taxes and property taxes). The adopted Budget made adjustments to key costs and revenues to respond to some of the problems identified.

Following preparation of the ***Six Year Cost and Revenue Forecast Report*** a longer term *Baseline Forecast* was prepared along with two *Case Studies*, as documented in this *Phase 2 Report*. This version of the CGM includes the following key refinements.

- The CGM base year data was updated to reflect the level of effort set forth through the preliminary 1997 budget commitments included in the 1997-1998 Biennial Budget.
- The CGM development forecast was extended to a 20-year period and refined to reflect land supply constraints on a neighborhood level.
- All costs and revenues were projected over a 20-year period.
- The assessed valuation forecast for Fire District 34 was refined to reflect projected development in the unincorporated areas of the District.
- The cost forecast was refined to reflect projected real dollar increases in salary and benefit costs faced by the City.
- The demand for police services were modified to reflect calls for service by land use.
- The sales tax projection was updated with the most current sales tax data which better reflects the effects of recent State legislation that provides sales tax exemptions to research and development activities.
- The CGM was modified to assign costs and revenues at the neighborhood-level and project-level. The estimating methods used for the neighborhood-level and project-level analysis are identical to those used for the Citywide analysis. As a result, the assignment of costs and revenues at the neighborhood-level and project-level reflects both the incidence of the activity, demand for service and revenue generating potential. Costs such as road maintenance and police service are allocated at the neighborhood-level and project-level based on the physical location of the facility, (roads and parks

(annexation areas only)) or the local demand for the service or the activity. Other costs that are predicated based upon a Citywide system and benefit all areas, such as recreation services, fire service and general government are projected for the City using marginal cost methods and then allocated to the neighborhood-level and the project-level based on the demand for service. The majority of the revenues, including property tax, sales tax, utility taxes, and business license tax are based on the revenue-generating capacity of the development at the neighborhood-level and the project-level. Grants and interfund service fees which are not site-specific are allocated at the neighborhood-level and project-level based on daytime population factors.

Overall, the results of this *Phase 2 Report* demonstrate the capabilities of the Cost of Growth Model and provide policy guidance regarding land use and fiscal issues faced by the City. Concurrently with consideration of the initial applications of the CGM, a version of the Model is being installed at the City. City staff will maintain the Model and provide, on a ongoing basis, applications of the model that will answer questions raised by policy-makers regarding the impacts of development projects, land use plans, annexation proposals, capital investments, and budgetary commitments, as these questions arise. The cost and revenue estimating procedures used in the CGM and other key model assumptions are described in the Documentation Report.

II. GROWTH PROSPECTS

INTRODUCTION

Redmond is experiencing a historically high level of urban development at the present time. In addition to projects under construction, a substantial amount of additional development has been approved and is expected to occur during the next few years within the greater Redmond area (e.g., the large-scale Urban Planned Developments approved by King County east of Redmond). As a part of the Cost of Growth Model (CGM), a detailed analysis of these growth prospects was conducted. This effort has taken advantage of extensive land supply data resources provided by the City of Redmond and King County (parcel/development project data bases) and the Puget Sound Regional Council (PSRC) regional forecasts.

The Development Forecast that, in combination with existing development, "drives" the municipal costs and revenues estimates included in the CGM is prepared by applying real estate demand estimates to a land supply data base. The CGM includes a "land supply data base" which documents the status of land within the City (and in Greater Redmond) with respect to development capacity and potential. This development capacity includes designation of all projects under construction (e.g., Town Center); "pipeline" projects (those projects that have received planning approvals and environmental clearances); planned projects (those projects undergoing discretionary review by the City); and zoned "vacant capacity".

The real estate demand estimates for the initial application of the CGM were derived from a combination of local market trends (as evidenced by the large number of projects under construction at this time) and, in the longer term, rates of growth implied by the PSRC forecast and land supply constraints.

KEY FINDINGS

1. ***Due to strong demand in the local commercial and residential real estate markets the City has committed a large portion of its vacant land capacity through recent planning approvals.***

   At the present time, there are several million square feet of space, and hundreds of housing units under construction and approved. When completed, these projects will utilize a majority of the large vacant parcels designated in the Comprehensive Plan for development within the current City limits.

2. ***At the present rate of development, the development capacity of the Comprehensive Plan will be reached well before its 20 year horizon.***

   The land supply constraints are projected to slow development by 2000. After 2000, new development is projected to be limited in neighborhoods such as Overlake, Education Hill, and Grass Lawn. After 2000, additional development is projected in Southeast Redmond, City Center, Willows, and unincorporated areas to the east (Plateau and East Redmond).

3. ***The development forecast encompasses areas beyond the City limit, including land outside the City and within the boundaries of Fire District 34.***

   Since the City provides Fire District 34 with contract fire protection services, and the entire service area is treated as a unified whole, growth in the District will influence the costs and revenues of the City's Fire Department and thus must be monitored and included in the City's growth forecasts. After 2000, the development in the unincorporated areas of Fire District 34 is projected to add assessed value at a faster rate than the City.

4. ***The pipeline projects currently identified by the City account for a majority of the remaining development potential in the City. Once these projects are completed, future development will be constrained by a lack of developable land. Additional development will be limited to redevelopment projects and infill sites.***

   There are currently 2,400 dwelling units and almost seven million square feet of commercial development in the pipeline. Only selected areas of the City will have vacant developable land once the pipeline projects are completed. Future development in areas such as the City Center and Overlake will be limited to redevelopment projects. Given the complications of redevelopment (parcel assembly, relocation, etc.), it is likely that the pace of development in the City will slow dramatically once the existing pipeline projects are completed. Future development will be limited to:

   a) Additional redevelopment of existing under-utilized parcels;

   b) Increases in development capacity;

   c) Annexation of unincorporated areas of King County.

DEVELOPMENT FORECAST

As a part of the CGM, a small-area Development Forecast has been prepared. This forecast was created to support the Baseline Forecast of costs and revenues and to develop the methodologies required by the City to maintain and apply the land supply and demand forecast data over time. Over time the City will need to maintain the underlying data sets and generate new development forecasts.

The Development Forecast is divided into two components:

- A short-term annual development forecast, reflecting the buildout of development commitments that have been made. Generally speaking the precision of this short term forecast is good, simply because much of the development expected during this period is under construction or has received entitlements and is in the pre-development phase. .Moreover, market conditions in the short-term are expected to remain strong.

- A 20 year development forecast reflecting longer range estimates of land supply and demand has been made. The CGM must anticipate long range implications of growth commitments that have been made by the City especially as documented in the Comprehensive Plan.

SHORT TERM DEVELOPMENT FORECAST

Table 1 presents the amount of development forecast for Redmond during the next six years. Slight changes in the short-term forecast are a result of projected supply constraints which were not incorporated in the original ***Six Year Budget Forecast***. Key aspects of the growth forecast include:

- Residential development is expected to continue at or near average rates of development that has been experienced during the past ten years, roughly 500 units per year. The mix of new multi-family and single family units will also be similar to recent trends, with 65 percent multi-family units and 35 percent single family units.

- Industrial development will be dominated by the ongoing buildout of existing business parks, particularly the Microsoft campuses, as well as other sites in the Overlake and the Willows areas. During the next six years, eight million square feet of industrial/business park space is expected to be constructed. This space will be occupied by approximately 14,400 new employees. This represents a significant amount of commercial development for a City of Redmond's size.

- Commercial development will be dominated by the completion and lease-up of the new Town Center Project. During the next six years, 1.5 million square feet of retail and service space is expected to be constructed. The Town Center is one of the largest retail and office centers currently being constructed in the region. This new space will be occupied by 2,700 employees and generate annual sales tax revenue approaching $2 million at buildout.

Table 1
Six Year Development Forecast
City of Redmond Cost of Growth Model

	1997	1998	1999	2000	2001	2002
Projected Increase in Residential Development						
Single Family Units	270	128	140	386	235	119
Multi Family Units	479	373	268	177	99	102
Total	749	501	408	563	333	220
Total Projected Residential Development						
Single Family Units	9,296	9,424	9,564	9,950	10,185	10,303
Multi Family Units	9,053	9,426	9,694	9,871	9,970	10,071
Total	18,349	18,850	19,258	19,821	20,155	20,375
Projected Increase in Population	1,766	1,206	1,036	1,484	862	537
Total Population	43,066	44,272	45,307	46,791	47,653	48,190
Increase in Commercial Development in Square Feet	1,996,000	1,793,200	3,204,200	319,400	329,000	323,300
Total Commercial Development in Square Feet	28,533,000	30,326,000	33,530,200	33,849,600	34,178,600	34,501,900
Projected Increase in Employment	2,624	4,890	7,129	4,988	1,284	597
Total Employment	47,624	52,515	59,644	64,632	65,916	66,513

Source: Economic & Planning Systems and the City of Redmond

LONG RANGE DEVELOPMENT FORECAST

As noted above, the long range development forecast is constrained by a lack of developable land in the City. The City is projected to reach buildout of commercial and industrial land by 2012. Residential development is projected to slow after 2000, as available development sites become limited.

Table 2 presents the development forecast for Redmond during the next 20 years. Key aspects of the growth forecast include:

- Residential development is expected slow as the amount of developable land declines and new development activity in East Redmond comes on line.
- Industrial development will shift from the Overlake area to Southeast Redmond as existing projects are built out and the supply of developable land declines. From 1996 through 2016, 10.9 million square feet of industrial/business park space is expected to be constructed.
- Commercial development will be dominated by the completion and lease-up of the new Town Center Project. During the next 20 years, 1.2 million square feet of retail and service space is expected to be constructed.
- In total, an additional 26,800 new employees are projected to be added in the City through 2016.

Table 2
Long Range Development Forecast
City of Redmond Cost of Growth Model

	2000	2005	2010	2015
Total Projected Residential Development				
Single Family Units	9,950	10,543	10,605	10,668
Multi Family Units	9,871	10,378	10,825	11,006
Total	19,821	20,921	21,429	21,674
Total Population	46,791	49,470	50,495	51,021
Total Commercial Development in Square Feet	33,850,000	35,418,000	37,097,000	37,399,000
Total Employment	64,632	68,217	71,317	71,791

Source: Economic & Planning Systems and the City of Redmond

III. BASELINE FORECAST RESULTS

PURPOSE OF THE BASELINE FORECAST

The Baseline Forecast is being prepared to address questions regarding the cost of growth in Redmond during the next 20 years, roughly the time-span of the PSRC regional projections (i.e., 1997 through 2016) and the horizon year of the *Redmond Comprehensive Plan*. As such, the Baseline Forecast will provide a benchmark for project-specific applications of the Cost of Growth Model.

It should be noted that the Baseline Forecast is based on extensive interviews with City Department Heads regarding the base year 1996 budget. The CGM has since been updated to reflect the preliminary 1997-98 City budget. Therefore the unit cost measures in the CGM may not reflect changes in service delivery that have been adopted as part of the final budget. While such changes are unlikely to be substantial, subsequent updates to the CGM should be accompanied by further interviews with Department Heads to assess how unit cost measures may have changed due to differences in the method of service delivery.

PROJECT DESCRIPTION

The growth projections described in the previous chapter set forth the project description for the Baseline Forecast. Under the Baseline Forecast it is assumed that there will be no additional major annexations to the City of Redmond except for the portion of North Redmond which corresponds to the 10-year service area as defined in the *Redmond Comprehensive Plan* (May 1995). Areas such as the Plateau are assumed to remain unincorporated from the City of Redmond in the Baseline Forecast. It should be noted that there are currently plans to create a separate City of Sammamish which will be voted on in February 1998.

The City of Redmond Fire Department provides fire services to the City of Redmond and to a substantial portion of unincorporated East Redmond. The three fire stations in the City and the three fire stations outside City limits together serve Fire District 34. In order to model the costs and revenues associated with growth within Fire District 34, the development forecast assumes that there will be additional urban development in the Blakely Ridge and Northridge areas of East Redmond starting in the year 2000.

CONCLUSIONS

The Baseline Forecast is designed to inform policy makers whether new development (or total City development) is generating sufficient municipal revenue to cover costs associated with providing desired levels of public services. The *Forecast* results are not intended to precisely predict departmental costs or the Budget that will ultimately be approved in any given year.

The Baseline Forecast focuses upon the annual revenues that are expected to be available to the City and the annual costs of providing City services presuming that existing City fiscal policies expressed in the Budget are maintained. Key fiscal policies include:

- Five percent of specific General Fund revenues are transferred to the CIP Fund;
- All sales tax revenue from construction is also transferred to the CIP Fund; and
- The prior year property tax levy increases at the rate of inflation.

The following conclusions summarize the results of the Baseline Forecast. These results do not reflect management efforts to resolve the fiscal problems identified by the Forecast. The model provides the capability to test a range of management options and develop a sustainable fiscal regime.

1. ***Recurring operating costs are shown to exceed annual municipal revenues. The annual operating deficits are projected to increase from $375,000 in 2000, as development slows, to over $4 million by 2015.***

   The Baseline Forecast indicates that if revenue policies remain constant and current levels of service and service delivery methods in the City of Redmond, are maintained, annual municipal service costs will exceed the annual municipal revenues during the next 20 years. **Table 3** provides an annual summary of costs and revenues projected for this period and the amount of net revenue that will accrue during this period.

   The underlying cause of the fiscal deficit indicated in the forecast appears to be related to growth and its on-going effects. In particular, the increase in the fiscal deficit is caused by the reduction of development related revenue, associated with the projected slowdown of development in the City and the on-going cost of maintaining service levels.

2. ***Reductions in recurring public service costs, or increases in municipal revenues, may be required to maintain historical budget commitments and future capital investments.***

   Presuming no significant deviation in the development forecast, no changes to State and local government revenue statutes, and no changes to existing service levels and capabilities, the *Baseline Forecast* reveals that the City will need to make significant changes in order to maintain a positive fiscal balance. The City will need to make changes to land use policies, service delivery, and/or revenue policies during the next 20 years if it wishes to maintain historical budget commitments and achieve other budget and investment priorities.

Table 3
Baseline Forecast: General Fund
City of Redmond Cost of Growth Model

	1997	2000	2005	2010	2015
Projected Revenue by Type					
Beginning Cash	$3,786,300	$0	$0	$0	$0
Property Taxes	$7,176,400	$9,125,200	$9,817,700	$10,259,900	$10,452,300
Sales Taxes	$12,707,000	$15,515,100	$16,317,000	$17,014,200	$17,126,200
Electric	$2,023,800	$2,466,400	$2,738,800	$2,823,200	$2,848,100
Telephone	$1,947,500	$2,392,700	$2,527,200	$2,615,800	$2,637,300
Gas, Garbage, Cable	$1,168,900	$1,359,200	$1,436,300	$1,477,100	$1,490,800
Criminal Justice	$598,400	$640,500	$644,700	$627,900	$606,700
Other Taxes	$293,500	$332,200	$351,100	$360,100	$363,600
Business Licenses	$462,900	$628,300	$663,100	$693,200	$697,800
State Shared Revenue	$1,266,500	$1,398,800	$1,456,300	$1,469,600	$1,465,200
Fire District 34	$2,926,400	$2,950,700	$4,092,200	$4,688,900	$5,336,400
Emergency Medical Service	$419,600	$449,100	$452,000	$440,300	$425,400
Overhead Fees	$1,508,900	$1,656,000	$1,816,600	$1,921,100	$2,002,000
Fines & Forfeitures	$323,400	$351,400	$371,500	$379,200	$383,200
Investment Interest	$967,700	$1,145,500	$1,239,300	$1,297,300	$1,325,200
Other	$1,903,000	$2,103,500	$2,223,600	$2,274,400	$2,297,300
Development Revenues	$3,206,500	$3,534,700	$3,673,900	$3,811,500	$3,817,100
Total	$42,686,700	$46,049,300	$49,821,300	$52,153,700	$53,274,600
Projected Costs by Dept.					
Non-Departmental	$5,640,000	$5,350,000	$5,581,000	$5,823,900	$5,950,800
Executive	$384,700	$429,200	$478,700	$508,100	$531,200
Legislative	$135,300	$151,000	$168,400	$178,700	$186,800
Human Resources	$576,300	$618,200	$660,400	$690,700	$718,300
Legal	$467,800	$546,000	$600,800	$638,600	$666,300
Finance	$3,934,200	$4,405,800	$4,866,200	$5,140,700	$5,349,000
Public Works	$6,347,500	$6,592,000	$6,907,100	$7,213,900	$7,403,700
Parks	$4,286,800	$5,010,100	$5,243,500	$5,425,500	$5,567,800
Fire	$8,417,700	$9,644,200	$12,478,800	$13,241,500	$13,988,100
Police	$8,488,700	$10,109,700	$11,091,100	$12,109,700	$12,995,100
Planning	$3,239,800	$3,567,700	$3,831,800	$4,081,000	$4,217,900
Total	$41,918,800	$46,423,900	$51,907,800	$55,052,300	$57,575,000
Ending Balance	$767,900	($374,600)	($2,086,500)	($2,898,600)	($4,300,400)

Note: Totals may not add due to rounding
Source: Economic & Planning Systems and the City of Redmond

3. ***Contributions of net General Fund revenues to capital programs and replacement reserves are not likely to be sustainable at current levels.***

   During recent years operating surpluses from the General Fund have allowed the Administration and the City Council to transfer net revenues into special funds and programs including the Capital Improvement Program (CIP) and replacement reserve accounts. The 1997/1998 Budget includes over $4.0 million in transfers to the CIP and replacement reserve accounts. While contributions to the CIP Fund are important, the transfers from the General Fund contribute to the projected deficit. The City has initiated new sources of CIP funding, including impact fees, and the recently adopted business and operations tax which may reduce the reliance on contribuions from the General Fund.

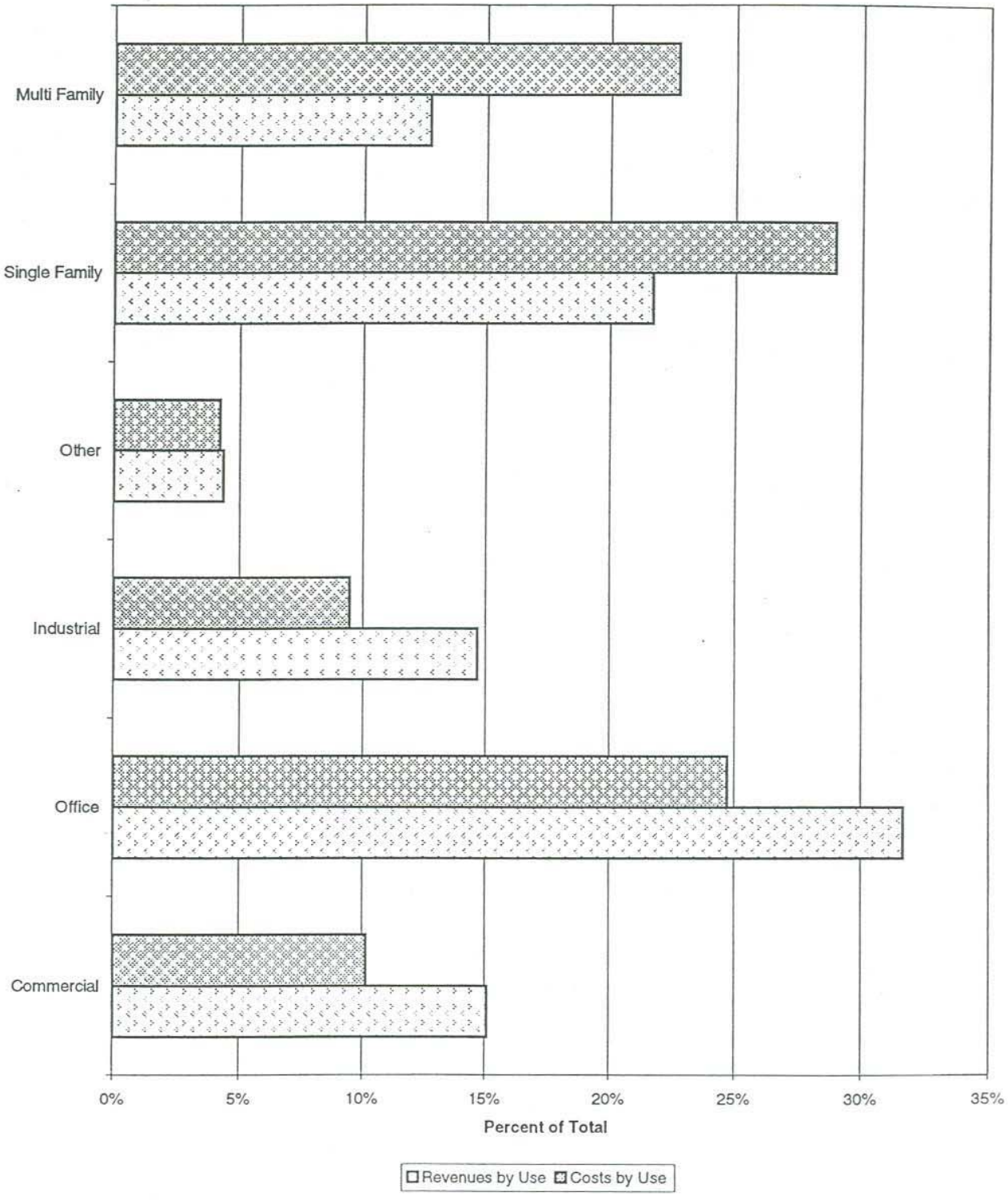
RESULTS BY LAND USE

The results for the Baseline forecast for the City were also generated for the following general land use categories: commercial, office, industrial, other non-residential, single-family, and multi-family. The estimate of costs and revenues by land use is a combination of the cost or revenue generating characteristics of the use, as well as an allocation of citywide costs and revenues. For example, revenues such as sales tax, property tax, and business license revenue can be assigned directly to each land use based on the revenue generating characteristics of the use. However, citywide costs such as human resources, finance, and other general government services must be allocated to the different land uses.

Wherever possible, costs and revenues are allocated based on the demand for service or revenue characteristics of the use. In those cases where an allocation procedure is necessary, costs and revenues have been allocated based on each uses share of daytime population. Daytime population was measured as total population plus 50 percent of employment. **Figure 2** shows the cost and revenue relationship for the six general land use categories.

The chart shows that the residential uses generate higher service costs than revenues and non-residential uses generate higher revenues than service costs. While this condition is true for the majority of municipalities in the United States, it does not imply that future development should only focus on commercial uses. It must be recognized that a community is composed of a mix of land uses that are vital for the sustainability of the community. For example, without sufficient housing, traffic congestion would increase as workers would be forced to commute from other communities.

Figure 2
Distribution of Fiscal Results by Land Use
Redmond Cost of Growth Model



REVENUE AND COST SUMMARY

FORECAST OF MUNICIPAL REVENUE

The following summarizes the key trends reflected in the forecast of Redmond's municipal revenue expected during the next 20 years. Features of the key revenue sources include:

- Property tax is expected to show growth related to substantial new development coming on-line in the next several years. Assuming the effective regular levy is held constant in current dollars (the levy increase is equal to the rate of inflation), revenues are expected to grow by over $3.3 million through the year 2015. In fact, a portion of the levy required for debt service will decline over time as the debt is amortized. For the purposes of the Baseline analysis, it is assumed that the prior years levy will be increased by three percent per year (the same rate as the assumed rate of inflation) and the additional property tax revenues made available by the real decline in debt payments will be absorbed into the General Fund. Property tax revenues increase from the unincorporated parts of Fire District 34 as anticipated urban development in East Redmond proceeds starting in the year 2000.

- Sales tax is expected to increase by about $2.0 million in the short term as a result of the Town Center project opening and significant development activity in the City. While there remains some uncertainty regarding the total amount of retail that will be constructed and leased, as well as the tenancy, a significant new revenue source will be created for the City. These sales tax revenues are net of the sales tax on construction. This analysis assumes that the current City policy of diverting sales tax revenues from construction directly into the CIP remains constant throughout the study period.

- Utility and other taxes are projected to increase proportionately as the user base grows in Redmond.

- Licenses and permits will continue to generate substantial funding for the City as the result of the amount of development expected during the next 20 years.

- Intergovernmental Revenues are expected to continue to grow at historical levels, as a function of statutory allocation formulas and growth in population.

FORECAST OF MUNICIPAL EXPENDITURES

All expenditures are based on the 1997 budget. All departmental expenditures include a factor for cost of living adjustments and for merit increases. The percentage of total costs represented by salaries and benefits are estimated for each cost activity. The cost of living and merit increase factor (which ranges from 1.00 to 1.50 percent) is then applied to the portion of activity costs that are comprised of salaries and benefits. The major factors influencing projected cost increases within the operating departments include the following:

- Non-Departmental activities are generally assumed to grow proportionately as total City operations grow. Therefore, contingencies, special programs and administration are assumed to grow in proportion to total General Fund expenditures while other cost activities are forecast based on a per City employee factor. Certain non-departmental expenditures such as General Fund transfers to the Arts Activity Fund and to the Housing Fund, transfers to the City's operating reserve, General Fund transfers to the CIP budget and transfers to the capital equipment replacement reserve are forecast based on existing City policies.

- General Government activities, including the Executive, Human Resources, Legal, and Finance Departments will grow approximately in proportion to the entire City budget, as demand on these support services grows with City size. Where possible, cost activities are forecast based on demographic projections such as prosecution services and traffic violations (forecast based on population and a portion of total employment); election services (forecast based on the number of voters); and business licenses (forecast based on total employment in the City).

- Public Works expenditures in the engineering construction inspection, and engineering design and plan review activities will increase in relation to annual development in the City. Ongoing road and street maintenance costs will also increase due to the addition of new road miles related to increased development and transportation capacity improvements. Public facility (e.g.; fire stations and city office buildings) maintenance costs are projected based on the total inventory of City facilities and a maintenance cost per square foot factor. A projection of additional City office space and facilities are incorporated into the model. CGM adds 250 square feet of building space for the portion of new employees presumed to require new office space.

- Park and Recreation maintenance activities will increase due to the Phase 1 addition of the 35-acre Avondale Community Park in 1999, and basic maintenance costs associated with the transfer of the Redmond Elementary School to the City in 1997 for use as a Community Recreation Facility. Park operations costs are forecast based on an average cost per developed park acre factor. As the City grows it is assumed that new parks will need to be added in order to maintain the current park LOS. After the year 2000, the model adds park acres if it is necessary to maintain the City's LOS standard. Other increases in recreation costs are due to increased demand for recreation services and programs from new residents and employees in the City.

- Fire protection expenditures will hold relatively constant for several years but are projected to increase significantly in 2001 due to the opening of a new fire station on Education Hill and the staffing of this station with an engine company (12 firefighters).

Additionally, it is projected that the Fire Department will need to add four firefighters at Station 14 in the year 2000 to allow for double coverage to meet increased calls for service, plus an additional ambulance company (six firefighters) at Station 12 to cover increased growth in the Overlake neighborhood. Starting in the year 2000, growth in East Redmond in the Blakely Ridge and Northridge areas will result in additional calls for service in the unincorporated parts of Fire District 34. Therefore, it is assumed that a new fire station, with 12 firefighters, will be required in the year 2004 to serve this projected increased development within Fire District 34.

Fire prevention and inspection costs are expected to increase in relation to the cumulative commercial development in the City as more inspections are required annually to cover all new and existing commercial development in the City. Fire facility's maintenance costs are projected based on a cost per square foot factor. Total fire facility costs will increase as the Department takes on the responsibility for maintaining and operating new fire stations. Total fire expenditures are expected to increase by about $5.6 million by the year 2015.

- Police protection expenditures will grow as the City grows in size and additional demands are made on all police operations. Police operations costs are estimate based on calls for service data provided by the Police Department. Projections in future calls for service are based on the current relationship between calls for service generated by different land use types such as single-family and multi-family residential uses, and retail, office, industrial, and other commercial uses.

  As the City grows and new development is added police operation costs increase based on the calls for service factor. Detention and correction costs are expected to increase in relationship to the number of detention days which are forecast to grow at a rate of about four percent annually. Total police expenditures are expected to increase by about $4.5 million by the year 2015.

- Planning expenditures associated with building permits, inspections, and land use management will fluctuate with annual development patterns. Code enforcement activities will increase as the amount of cumulative development in the City grows. Other planning activities are expected to increase approximately in proportion to population and employment growth.

IV. NEIGHBORHOOD CASE STUDY RESULTS

INTRODUCTION

The CGM is designed to allow the user to examine the costs and revenues generated by any combination of the 10 neighborhoods in the City or any of the three potential annexation areas (North Redmond, East Redmond, or the Plateau). The case study presented in this report focuses on the potential annexation of the Plateau.

The Plateau annexation case study was chosen in order to illustrate the CGM's ability to analyze the effects of making a significant geographical change to the existing City limits. Since the Plateau is included within Redmond's twenty-year service boundary in the *Redmond Comprehensive Plan, Final Draft* , May 1995 and there are ongoing policy discussions about the possible incorporation of the Plateau, this case study can provide policy makers with useful and relevant data that can assist with a major policy decision regarding the future of Redmond in the near term.

This case study is a good illustration of how the CGM may be used to address major policy decisions regarding future annexations to the City. The CGM currently assumes that the City will assume responsibility for all municipal services and receive all municipal revenues from the annexed area. However, since the actual fiscal performance of the Plateau (or any other annexation area), will depend upon negotiated tax sharing and service-delivery responsibilities, a complete and thorough analysis of the fiscal impacts of annexing the Plateau will require further in depth research. The CGM provides the basis for more in-depth research. The model is designed to allow the City to modify the projected fiscal performance of any area to reflect the specifics of the actual annexation agreement. In particular, further research should include interviews with the County assessor and the key service providers to refine the cost and revenue estimates. The major developers for planned and proposed projects in the Plateau, should be interviewed as well, to refine the development projection.

PROJECT DESCRIPTION

The Plateau case study assumes annexation of the area in southeast Greater Redmond described as the Plateau that corresponds to the Redmond twenty-year service area as described in Map A-4 in the *Redmond Comprehensive Plan, Final Draft* May 1995. The legal description of the Plateau is provided on Map A-2 in the *Redmond Comprehensive Plan, Final Draft* May 1995 and consists of approximately 4,500 acres. Estimates derived from the *Metroscan* database indicate that there are approximately 9,700 dwelling units, 850,000 square feet of non-residential building space, of which approximately 157,000 square feet is commercial space.

Total assessed value in the Plateau is approximately $1.48 billion. The Redmond Planning Department estimates that there is the capacity for an additional 5,000 to 6,000 dwelling units and about 150,000 square feet of neighborhood commercial uses. For the purposes of this case study, it is assumed that annexation of the Plateau will occur in the year 2000.

CONCLUSIONS

Table 4 shows the projected revenues and costs in the General Fund associated with the Plateau annexation. The revenues reflect the existing City tax rates and related ordinances. The costs reflect the demand for and cost of providing services such as police, road maintenance and park maintenance. Other cost items reflect the Plateau's impact on citywide costs. The cost for citywide services, such as General Government and department-level administration have been increased based on the amount of existing and future development in the Plateau. In light of these assumptions, the actual incremental costs associated with the annexation may differ from those shown in **Table 4**.

The results of the Plateau Case Study are shown for the Years 2000 through 2003. The results of the model indicate that the cost of providing municipal services to the Plateau will exceed revenues by $1 million in the year of annexation. The deficit is projected to increase to approximately $1.6 million per year as additional development is added in the Plateau and additional service demands are generated. Factors that contribute to the projected deficit include:

- The large population base in the Plateau will require significant public safety services (police and fire).
- With the addition of the Plateau to the City, additional park acreage will be required to maintain the City's park level of service standards and additional recreation programs will be required to serve the new population.
- The lack of commercial development in the Plateau results in limited sales tax revenue for the City after annexation.

Table 4
Plateau Annexation Analysis
City of Redmond Cost of Growth Model

	2000	2001	2002	2003
Projected Revenue by Type				
Beginning Cash	$0	$0	$0	$0
Property Taxes	$2,411,100	$2,464,700	$2,513,900	$2,561,500
Sales Taxes	$316,300	$325,800	$335,600	$345,600
Electric	$852,100	$870,000	$888,300	$907,000
Telephone	$605,900	$612,900	$620,000	$627,200
Gas, Garbage, Cable	$539,700	$545,500	$551,300	$557,300
Criminal Justice	$361,900	$362,000	$362,100	$362,300
Other Taxes	$151,900	$153,500	$155,100	$156,700
Business Licenses	$17,300	$17,800	$18,300	$18,800
State Shared Revenue	$711,100	$715,900	$720,900	$726,000
Fire District 34	$416,700	$476,700	$490,400	$505,000
Emergency Medical Service	$253,800	$253,800	$253,900	$254,000
Overhead Fees	$385,700	$441,600	$456,400	$464,700
Fines & Forfeitures	$198,600	$200,600	$202,700	$204,800
Investment Interest	$228,500	$234,600	$238,300	$242,000
Other	$1,091,900	$1,103,200	$1,114,600	$1,126,200
Development Revenues	$643,200	$651,200	$659,300	$667,500
Total	$9,185,700	$9,429,800	$9,581,100	$9,726,600
Projected Costs by Dept.				
Non-Departmental	$1,261,500	$1,349,500	$1,377,600	$1,396,200
Executive	$79,700	$97,900	$102,300	$104,400
Legislative	$28,000	$34,400	$36,000	$36,700
Human Resources	$301,000	$304,400	$308,300	$312,300
Legal	$153,300	$164,600	$168,800	$171,900
Finance	$990,600	$1,145,100	$1,185,100	$1,206,200
Public Works	$1,383,100	$1,425,400	$1,449,700	$1,471,900
Parks	$965,300	$1,005,300	$1,024,800	$1,039,300
Fire	$1,807,800	$2,020,600	$2,043,900	$2,066,800
Police	$2,197,700	$2,251,700	$2,307,400	$2,364,900
Planning	$1,082,400	$1,113,700	$1,134,900	$1,155,400
Total	$10,250,400	$10,912,600	$11,138,800	$11,326,000
Ending Balance	($1,064,700)	($1,482,800)	($1,557,700)	($1,599,400)

Note: Totals may not add due to rounding
Source: Economic & Planning Systems and the City of Redmond

KEY COST ASSUMPTIONS

The major factors influencing projected cost increases within the operating departments include the following:

- Park and Recreation maintenance activities are expected to increase significantly when the Plateau is annexed to the City. It is assumed that the City will immediately take on the maintenance of approximately 12 acres of existing parks, currently managed by the County, within the Plateau. In addition, many more park acres will need to be acquired and managed if the City is to maintain the current park LOS within the Plateau. Furthermore, recreation program costs will increase in order to serve the additional residents projected to live in the Plateau.

- Fire protection expenditures will increase when the Plateau is annexed to the City. It is assumed that the Fire Department will need to take over the operations of Fire Station 222 from Fire District 10 (12 new firefighters) in order to serve the Plateau with fire protection and emergency medical services.

It must be noted that since the possible tax sharing arrangements with District 10 are unknown at this time, no attempt to model additional revenue from District 10 has been made. The CGM includes the additional costs associated with the Fire Department taking on the operation of Station 222 to serve development within the Plateau, but it does not include any offsetting revenues that may result from incorporating part of Fire District 10. In reality, the City may negotiate a tax sharing agreement with Fire District 10 that could offset in whole, or in part, some of the increased fire costs associated with annexing the Plateau. Additional research will be required to address this issue. The model can readily be modified to reflect this situation once more information is available.

V. TOWN CENTER CASE STUDY RESULTS

INTRODUCTION

The CGM is designed to allow the user to examine the costs and revenues generated by any combination of development projects proposed in the City. Furthermore, the model can be used to examine the financial impact of proposed changes to a development project. The case study presented in this report focuses on the impact of the Town Center Project.

The Town Center case study was chosen in order to illustrate the CGM's capacity to analyze the fiscal impacts of a specific development project on the City's budget. Since the Town Center project is a significant development for the City of Redmond with a promise of substantial sales tax revenues, this particular project was chosen to illustrate the power of the CGM to test alternative project scenarios.

The Town Center project as described in this section, represents the reduced retail space scenario. In order to illustrate the utility of the CGM an alternative Town Center scenario was developed that tests the impacts of the project with less retail space. Under this Reduced Retail Scenario, it is assumed that additional phases of retail development will be changed to office and other uses. Therefore, the Town Center Case Study is an illustration of how the CGM can be used to describe the potential fiscal impacts of a given proposed development within the City of Redmond.

PROJECT DESCRIPTION

The project description for the Town Center analysis is outlined in the following table.

Use	Approved Master Plan (Sq. Ft.)	Reduced Retail Space Scenario (Sq. Ft.)
Retail	700,000	616,236
Office	574,000	777,864
Hotel	100,000	130,000
Total	1,374,000	1,525,000

CONCLUSIONS

Table 5 shows the projected revenues and costs in the General Fund associated with the Town Center Project under the revised retail space scenario. The revenues reflect the existing City tax rates and related ordinances. The costs reflect the demand for and cost of providing services such as police, road maintenance, and park maintenance. The cost for citywide services, such as General Government and department-level administration, have been allocated to the Town Center on a per daytime employment basis.

Table 5
Town Center Analysis: Reduced Retail Space Scenario
City of Redmond Cost of Growth Model

	1997	1998	1999	2000
Projected Revenue by Type				
Beginning Cash	$13,700	$0	$0	$0
Property Taxes	$53,600	$134,000	$225,900	$296,600
Sales Taxes	$554,300	$1,097,400	$1,559,400	$1,721,600
Electric	$7,300	$20,900	$42,300	$56,300
Telephone	$10,400	$29,400	$58,800	$77,600
Gas, Garbage, Cable	$3,200	$9,000	$18,000	$23,800
Criminal Justice	$0	$0	$0	$0
Other Taxes	$500	$1,400	$2,800	$3,700
Business Licenses	$4,700	$13,300	$26,600	$35,100
State Shared Revenue	$1,100	$3,100	$6,300	$8,300
Fire District 34	$36,800	$77,700	$117,600	$128,000
Emergency Medical Service	$0	$0	$0	$0
Overhead Fees	$11,600	$26,400	$39,100	$46,000
Fines & Forfeitures	$0	$0	$0	$0
Investment Interest	$18,900	$38,600	$56,500	$64,200
Other	$1,400	$3,800	$7,600	$10,100
Development Revenues	$55,100	$96,100	$109,100	$109,100
Total	$772,600	$1,551,100	$2,270,000	$2,580,400
Projected Costs by Dept.				
Non-Departmental	$24,100	$113,800	$171,700	$198,300
Executive	$3,200	$7,500	$11,600	$13,700
Legislative	$1,100	$2,600	$4,100	$4,800
Human Resources	$2,100	$5,700	$11,000	$14,100
Legal	$2,600	$6,600	$11,600	$14,500
Finance	$29,000	$69,800	$111,700	$133,400
Public Works	$53,100	$99,500	$92,000	$97,600
Parks	$5,000	$14,800	$29,600	$39,300
Fire	$100,500	$227,300	$356,200	$397,400
Police	$113,600	$291,700	$451,600	$519,300
Planning	$43,900	$83,900	$71,300	$76,900
Total	$378,200	$923,200	$1,322,400	$1,509,300
Ending Balance	$394,400	$627,900	$947,600	$1,071,100

Note: Totals may not add due to rounding
Source: Economic & Planning Systems and the City of Redmond

The results of the Town Center Case Study are shown for the Years 1997 through 2000. The results of the model indicate that the revenues generated by the Town Center Project will exceed the cost of providing municipal services by $400,000 per year in the initial year of occupancy. The surplus is projected to increase to approximately $1.0 million per year at full occupancy. Factors that contribute the projected surplus include:

- The large retail base in the Town Center will generate significant sales tax revenue for the General Fund.
- The high-valued commercial space will contribute to the City's property tax base.
- These revenues will be offset by increases in police service costs. Based on calls for service data, it is projected that the Town Center will require $500,000 in police services by the year 2000. The other department costs represent an allocation of citywide costs to the project.

CHANGE FROM APPROVED MASTER PLAN

Table 6 shows the projected costs and revenues associated with the original approved Master Plan for the Town Center and the Reduced Retail Scenario as of the year 2000. In this Case Study, a sensitivity analysis has been prepared that illustrates how the fiscal impacts of the Town Center would vary if the approved plan is altered as shown in the project description. As a result of the decrease in retail space in the Reduced Retail Scenario, this scenario generates less sales tax revenue than the approved Master Plan. While the following table illustrates these differences, the changes are small on a percentage basis.

Table 6
Town Center Analysis: Reduced Retail Scenario vs. Original Plan as of the Year 2000
City of Redmond Cost of Growth Model

	Original Plan	Reduced Retail Scenario	Change from Original Plan
Projected Revenue by Type			
Beginning Cash	$0	$0	$0
Property Taxes	$264,600	$296,600	$32,000
Sales Taxes	$1,818,800	$1,721,600	($97,200)
Electric	$48,700	$56,300	$7,600
Telephone	$67,100	$77,600	$10,500
Gas, Garbage, Cable	$20,500	$23,800	$3,300
Criminal Justice	$0	$0	$0
Other Taxes	$3,200	$3,700	$500
Business Licenses	$30,300	$35,100	$4,800
State Shared Revenue	$7,100	$8,300	$1,200
Fire District 34	$127,600	$128,000	$400
Emergency Medical Service	$0	$0	$0
Overhead Fees	$43,700	$46,000	$2,300
Fines & Forfeitures	$0	$0	$0
Investment Interest	$64,800	$64,200	($600)
Other	$8,700	$10,100	$1,400
Development Revenues	$98,400	$109,100	$10,700
Total	$2,603,500	$2,580,400	($23,100)
Projected Costs by Dept			
Non-Departmental	$196,200	$198,300	$2,100
Executive	$13,300	$13,700	$400
Legislative	$4,700	$4,800	$100
Human Resources	$12,300	$14,100	$1,800
Legal	$13,300	$14,500	$1,200
Finance	$127,600	$133,400	$5,800
Public Works	$87,400	$97,600	$10,200
Parks	$34,000	$39,300	$5,300
Fire	$395,300	$397,400	$2,100
Police	$512,700	$519,300	$6,600
Planning	$68,700	$76,900	$8,200
Total	$1,465,500	$1,509,300	$43,800
Ending Balance	$1,138,000	$1,071,100	($66,900)

Note: Totals may not add due to rounding
Source: Economic & Planning Systems, and City of Redmond

VI. APPLICATIONS AND USES OF THE COST OF GROWTH MODEL

The *Cost of Growth Model* was conceived as a City-maintained tool for conducting fiscal impact analysis on development projects and more general development commitments such as Comprehensive Plan amendments. While the fundamental purpose of the *Model* is to improve City decision-making regarding land use planning and development project decisions, the *Model* can also serve as a management tool, evaluating the potential effects of structural revenue changes and public service delivery options. As such, the *Model* reflects the fact that the "costs of growth" (i.e., the municipal costs and revenues that derive from new development) are a function not only of "demand" for new services, but also of what services are provided and how they are provided. Accordingly, the *Model* has a range of uses related to City policy-making and administration, in addition to "fiscal impact analysis" intended to determine the cost of growth. The following chapter addresses the following uses and relationships of the *Model* within City government:

- Growth Management
- Budget Process
- Level of Service Standards
- Existing Policy Documents, Procedures, and Data
- Capital Improvement Program

Policy makers and City staff will need to have a common understanding of how municipal costs will increase as planned development builds out and at what point economies of scale and staffing efficiencies can be attained. The CGM needs to be used as a "problem solving" tool that must be equally understood and accessible to both policy-makers and City staff. The results of specific *Model* runs will often suggest certain policy changes. Unless both staff and policy makers believe in the credibility of the *Model* results, and are willing to implement the necessary policy changes, the CGM will not be useful tool.

GROWTH MANAGEMENT

The *Cost of Growth Model* was originally conceived to estimate the long-term fiscal consequences of growth-related actions by the City (e.g., development project approvals, municipal annexations, and Comprehensive Plan amendments). Despite a rapid rate of commercial growth in the City and fiscal policies intended to promote sustainable and balanced revenue sources, operating revenues currently generated have been shown to be inadequate to match the long-term costs of providing services and facilities needed to support new development. The CGM will allow testing of various solutions to this problem.

APPLICATIONS

1. *Apply the CGM as a part of major development approvals.*

A principle application anticipated for the CGM is development project analysis. Historically, fiscal analysis were often conducted as a part of environmental review, but not all projects included fiscal analysis, and the methods used were inconsistent and not sound in all cases. The CGM will allow the City to conduct fiscal analysis as a part of all major project approvals, in a cost-effective and consistent manner. It is possible that in some large projects, the project proponents or City consultants would conduct research and analysis that could contribute to the CGM. Such applications can help determine the need, if any, for project-specific fiscal mitigation measures.

2. *Apply the CGM as a part of major Comprehensive Plan amendments.*

The CGM can also help evaluate the impacts and merits of Comprehensive Plan amendments, either project-specific amendments or larger area-wide or Citywide amendments. For example, the CGM could provide an analysis of the impacts resulting from changing potential development mix and densities as reflected in the Comprehensive Plan. This information can help the City determine the impacts of comprehensive land use policy and balance the variety of community goals and policies associated with new development.

3. *Study the impacts of large-scale potential annexations.*

A case study application of CGM has addressed the impact of annexing the Plateau to the City. This is an example of how the CGM can be applied. An actual evaluation would require more refined assumptions and data. The results of fiscal analysis conducted on an annexation area can help establish the necessary tax rates and terms of agreements between existing agencies (e.g., King County) and the City.

4. *Study the impacts and relationships with large scale unincorporated development.*

Large-scale unincorporated development (e.g., the East Redmond UPD's) will have a financial impact on the City. The CGM can be applied to determine the fiscal effects of such unincorporated development upon the City. This information can be used to support negotiations related to fiscal mitigation and cooperative agreements with existing service providers in the area.

LINKAGE TO THE BUDGET PROCESS

The CGM was designed to forecast municipal costs and revenues as a part of policy determinations, especially those related to development. The CGM was not designed to precisely predict departmental budget requirements as proposed by the Mayor and/or adopted by the City Council as a part of the Budget process.

As such, annual results of the *Model* will not necessarily reflect the particular decisions that will be made as a part of each budget; but rather, the *Model* reflects the cost and revenue implications of current budget resources, commitments, and service level policies in the context of the future growth.

The CGM is, however, based directly upon the City's Budget structure, cost, and revenue characteristics. This linkage to the Budget provides a key input for cost and revenue estimating methods used, and allows for updating as the Budget evolves from year-to-year. The linkage to the City's Budget can also help evaluate and establish future staffing plans, evaluate service delivery options, and anticipate major cost increases related to new facilities (e.g., fire stations), or services (e.g., new police patrols). Specifically, the CGM can be run as a budget planning tool and be used to test the budgetary implications of major changes in cost or revenue policy or circumstances, such as:

- The long-term impacts of proposed (or imposed) State legislation such as those associated with State economic development policies that forgive sales and use taxes on certain classes of machinery, equipment, and facilities.

- Key variables in the cost of municipal services, including level of services provided and the efficiency and/or cost effectiveness of services provided can be tested. For example, it is conceivable that a given level of service could be provided at a lower unit cost, assuming that a more cost-effective way of delivering the service could be found. The CGM will allow testing of alternative service provision methods.

APPLICATIONS

1. *Prepare annual forecast as a part of Budget preparation and monitoring.*

   The City Council has historically considered a budget forecast of municipal revenues and costs as a part of its annual budget deliberations. Consideration of the amount of revenue available in the near term future and expected departmental costs increase has been and will remain exceedingly important factors as the City Council establishes the current year departmental budgets, capital expenditure commitments, and revenue policies.

   The CGM provides the City with an improved forecasting model that should be used to generate short-term budget forecasts in the future. One of the key features of the CGM is that it links the inter-relationships between costs, revenues, city policy, and projected development in a single model. While refinements to the model will be required over time, the model provides a firm foundation for future short-term budget forecasting. The short term (six year) preliminary forecast of City costs and revenues that was prepared as a part of the first Biennial Budget (1997/1998) adoption process using the CGM was an example of this application.

2. ***Update CGM cost forecast module with Biennial Budget municipal costs.***

   The Finance Department has excellent historical records that have been used to calibrate the CGM. The CGM provides the Finance Department with a modeling framework for organizing and evaluating budget data as it becomes available. The components of the CGM will allow the City to build a consistent historical database of budget data.

3. ***Review departmental cost categories and fund accounting***

   Preparation and maintenance of the CGM rely upon data aggregated from the City's operating budget. As a part of the CGM preparation, a number of opportunities were revealed for standardizing budget structure among the various City departments. This effort will make CGM maintenance more efficient, and departmental budgets more transparent.

4. ***Review and monitor departmental cost recovery.***

   The CGM could be modified to measure the amount of cost recovery achieved by departments collecting user fees and charges, and test the impact of adopting additional, higher or lower, user fees and charges. This information can also help gauge impacts of reduced user charges that may result from a downturn in development activity caused by a recession or simply as the City approaches buildout.

LEVEL OF SERVICE STANDARDS

"Level of Service" standards are measures used to describe the quantity and quality of services provided by public agencies. The Level of Service concept is based on the premise that there is a connection between achieving quantitative targets for given public services and sustaining the quality of the service provided to residents and businesses in a community.

The City's level of service standards, including those adopted by policy and those established by budget commitments, are a principle factor in determining the cost of City services. The CGM incorporates current policy-based level of service standards and de facto standards implied by the budget as a basis for its cost estimating techniques.

Level of Service standards provide the City Council, the Planning Commission, City staff, and citizens with a benchmark upon which to measure the degree of impact resulting from Comprehensive Plan amendments, project approvals or denials, particular capital investments, budget allocations, and staff changes. Based upon the potential impacts identified, the City policy-makers can take the appropriate action to maintain the adopted Level of Service. These modifications may include adding staff (or achieving greater efficiency from existing staff resources), increasing investment in capital facilities, denying or modifying the proposed development project or plan, or reducing service levels elsewhere to offset identified impacts.

APPLICATIONS

1. ***The Level of Service standards applied in the Cost of Growth Model can be tested for affordability and adjusted as necessary to balance quality of service with affordability.***

   The CGM can test the effect of different Level of Service standards on the City's operations budgets. This information will allow policy makers to anticipate budget problems and respond with adjustments in demand, revenues, or the Level of Service standards.

   Levels of Service standards need to be sensitive to the type of growth expected to occur. Redmond is unusual in that more growth in jobs is planned and proposed than growth in the resident population. Thus, Level of Service standards must accurately measure the impact of employees. While employees may not demand as much municipal service as residents, they will still have an impact on most operating departments and particularly on roads, transit, police, fire, parks, and recreation services.

LINKAGE TO EXISTING POLICY DOCUMENTS, DATA, AND INFORMATION GATHERING

The Cost of Growth Model has been prepared as an integrated component of ongoing City policy documents, procedures, data gathering, and maintenance. The CGM is related to these varying aspects of City operation in a number of ways, including policy making (e.g., fiscal evaluation of land use policy) as discussed above. The CGM also relies upon data collected by City departments, most importantly land use information collected and maintained by the Community Development Department, but also specific data gathered by operating departments such as "calls for service" data collected by the Police Department. The Cost of Growth Model builds on existing policy, data bases, and procedures currently used by the City, rather than requiring independent data which would impose additional burdensome data collection efforts on City staff.

Table 7 describes key computerized systems being used and information gathered by the various City Departments to track costs, revenues, and services that relate, in one manner or another, to the CGM. The systems are organized by department. The purpose of the system is noted along with the related module and relationship to the CGM.

Table 7
Relationship of Existing Procedures and Systems to the Cost of Growth Model (CGM)
City of Redmond Cost of Growth Model

Department	Existing Redmond System	Applicable CGM Module	Status in CGM	Comments
Finance	Budget - Ross Accounting System	Cost & Revenue modules	Remains external to CGM	Used to define base year costs and revenues in CGM
Finance	Sales & use tax data - STARS Report: type of system unknown	Revenue module	Remains external to CGM	Provides data on retail sales by industry. Base year data is imported into the Sales Tax Module
Finance	Salary & Benefit program - Access Database	Cost module	Remains external to CGM	Provides information on labor costs by staff person; data is used to estimate staff by department in the CGM
Finance	Revenue forecast - Lotus spreadsheet	Revenue module	Incorporated into CGM	Functionality and features enhanced in CGM
Planning	Permit Tracking System - type of system unknown	Development module & Revenue module	Remains external to CGM	Not currently used in CGM. Should be used to develop pipeline project listings.
Planning	Planned Development Projects - not computerized	Development module	Remains external to CGM	Used to develop pipeline project listings.
Planning	Land Capacity - Parcel database – Big Red	Development module	Remains external to CGM	Used in CGM to define base year land use and development capacity.
Planning	Long-term Forecast	Development module	Incorporated into CGM	Now incorporated into the development forecast module of CGM
Police	Master Log of Calls for Service:	Cost module	Remains external to CGM	Call for service data by land use used in CGM to forecast future police CFS
Fire	Incidence Data	Cost module	Remains external to CGM	Call for service data by land use used in CGM to forecast future fire CFS and allocate fire costs.

APPLICATIONS

1. ***The data and information available in existing City data bases must be coordinated with the CGM.***

   The efficiency and practicality of the CGM will depend in large measure upon the degree to which it is integrated into ongoing City activities and operations. Such integration will assure its utility, familiarity, and cost-effectiveness.

2. ***There have recently been completed several studies that will affect future policies and budgeting decisions considered in the Cost of Growth Model. The findings of these studies must, in all cases, be coordinated with the Cost of Growth Model.***

   - A set of Impact Fee Ordinances have been adopted that provide an ongoing source of capital funding. The fee ordinances can be incorporated into CGM to generate estimates of the fee revenue.

   - A Public Facilities Plan is proposed. This will provide an assessment of long-range space needs for the City government. As this is completed, the information should be incorporated into the facility forecast module of CGM.

   - A User Fee Study has been completed. This study provides a comprehensive review of all Citywide indirect costs for support departments and allocation to the General Fund and specific enterprise funds. This study has been used to estimate the General Fund overhead fee charges in the CGM.

   - A Compensation Study is currently being conducted which addresses salary structure, job descriptions, and salary ranges for City staff excluding the uniformed police, fire, and maintenance employees. The results of this study should be used to modify the wage and salary cost impact, if deemed necessary.

3. ***The Cost of Growth Model is integrated with a number of data bases, systems, and technical procedures currently used in the City of Redmond.***

   While the CGM effectively uses a variety of existing City data sources, there may be other opportunities to incorporate data from the existing procedures and systems into the Cost of Growth Model, and also to use the Cost of Growth Model output for specialized analytical purposes. Existing procedures are incorporated in one of two ways: (1) the procedure can remain external to the Cost of Growth Model with specified data inputs or outputs, or (2) the procedure could be fully incorporated into the Cost of Growth Model, in which case, the Cost of Growth Model would supersede the existing system. The table above sets forth the current status of the data and procedures in terms of the incorporation into the CGM.

LINKAGE TO CAPITAL IMPROVEMENT PROGRAM

The City has adopted a six-year Capital Improvement Program that is funded by a combination of General Fund transfers; the Arterial Street Fund (developer mitigation contributions as required under SEPA); Restricted Interest; Vehicle Registration Fees; the Real Estate Excise Tax; and Interest Earnings. General Allocable Funds (GAF) are distributed across five "functional areas" of the capital investment program. These budget commitments have a direct impact upon the operating budget and are modeled by the CGM.

The City's adopted Capital Improvement Program (CIP) has a direct impact on the ongoing operations and maintenance costs incurred by the City; as facilities are built, they need to be regularly maintained and provisions need to be made for their eventual replacement. Furthermore, current methods of funding the CIP rely on the General Fund being able to produce significant fiscal surpluses now and in the future.

APPLICATIONS

1. *The CGM provides a linkage between the CIP and its effect on operating department's annual budgets for maintenance of facilities such as roads and parks.*

   The Capital Improvement Program (CIP) is currently developed in six year planning cycles with biannual updates with no direct linkage to the annual operating budget process. The CGM now provides a linkage between the department's operating budgets and the CIP so that the effect of new facilities on the City's fiscal well being is tested.

2. *The linkage between the Capital Improvement Program, adopted Levels of Service, and the distribution of General Allocable Funds can be evaluated.*

   The City has adopted a policy for allocating General Fund revenue for capital improvements to the following functional areas: transportation (45 percent), parks and recreation (20 percent), fire (15 percent), police (10 percent), General Government (5 percent) and Council Contingency (5 percent). The CGM can be modified to test the adequacy of this allocation with respect to achieving adopted levels of service. The CGM can show the effect on the fiscal balance of diverting General Fund revenues to the CIP.

3. ***The CGM can test the fiscal consequences of adopting and consistently implementing a "sinking fund" approach to asset depreciation and replacement.***

   Capital facilities, such as roads, recreational equipment, City buildings, and traffic lights, need to be replaced as they wear out. A "sinking fund" approach allows funds to be set aside that are tied to a life-cycle for each major asset. The City currently has partially funded asset replacement reserves but may not have adequately budgeted for all facility and asset replacements. Therefore, the true costs of growth are not internalized, and planned for until such provisions are made for each major facility constructed. The CGM provides the user with the option to increase the replacement reserve funding level to the fully-funded amount and to test the effect of increasing these reserves on the General Fund fiscal balance.